

CLAIMS

1. A wavelength plate having the same polarizing characteristics against monochromatic lights having a different wavelength, which is obtained by laminating a retardation film (A) that provides a retardation of $(1 + X)\lambda$ to light having a wavelength λ (nm) as defined according to the following expression (1) as an essential component and a retardation film (B) that provides a retardation of $(1/4 + Y/2)\lambda$ or a retardation film (C) that provides a retardation of $(1/2 + Z)\lambda$ [wherein X, Y, and Z each independently represent 0 or an integer of 1 or more] such that an optical axis of the retardation film (B) or retardation film (C) intersects with an optical axis of the retardation film (A):

$$[(\lambda_S + \lambda_L)/2] - 200 \leq \lambda \leq [(\lambda_S + \lambda_L)/2] + 200 \quad (1)$$

λ_S : wavelength (nm) of monochromatic light in the shortest wavelength side; and

λ_L : wavelength (nm) of monochromatic light in the longest wavelength side.

2. The wavelength plate according to claim 1, wherein the retardation films are bonded to a transparent support.

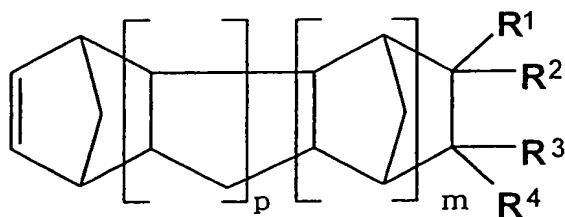
3. The wavelength plate according to claim 1 or 2, wherein the retardation films comprise a cyclic olefin based resin-containing material.

4. The wavelength plate according to any one of claims 1 to 3, wherein a retardation film having a ratio (Re800/Re550) of a retardation (Re800) in light having a wavelength of 800 nm to a retardation (Re550) in light having a wavelength of 550 nm of from 0.90 to 1.05 is used.

5. The wavelength plate according to any one of claims 1 to 3, wherein the cyclic olefin based resin is at least one member selected from the group consisting of (1) a ring-opening polymer of a specific monomer represented by the following general formula (1); (2) a ring-opening copolymer of a specific monomer represented by the

following general formula (1) and a copolymerizable monomer; (3) a hydrogenated (co)polymer of the foregoing ring-opening (co)polymer (1) or (2); (4) a (co)polymer resulting from cyclization of the foregoing ring-opening (co)polymer (1) or (2) by the Friedel-Crafts reaction and then hydrogenation; (5) a saturated copolymer of a specific monomer represented by the following general formula (1) and an unsaturated double bond-containing compound; and (6) an addition type (co)polymer of at least one monomer selected from a specific monomer represented by the following general formula (1), a vinyl based cyclic hydrocarbon based monomer and a cyclopentadiene based monomer, and a hydrogenated (co)polymer thereof:

General Formula (1)



[in the formula, R^1 to R^4 each represent a hydrogen atom, a halogen atom, a hydrocarbon group having from 1 to 30 carbon atoms, or other monovalent organic group, and may be the same or different; R^1 and R^2 , or R^3 and R^4 may be taken together to form a divalent hydrocarbon group; R^1 or R^2 and R^3 or R^4 may be bonded to each other to form a monocyclic or polycyclic structure; m represents 0 or a positive integer; and p represents 0 or a positive integer.]